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## **EXECUTIVE SUMMARY**

Date Summary Prepared: September 24, 2008

Mine Name: Point of the Mountain	I.D. Number: M035/0026
Operator: Geneva Rock Products	Date Original Notice Received: November 15, 2005
Address:	County:
1565 West 400 North	Salt Lake
PO Box 538	New/Existing: New LMO
Orem, Utah 84059	Mineral Ownership: Fee
<b>Telephone:</b> 801-802-6900	Surface Ownership: Fee
Contact Person: Carl Clyde	Lease No.(s): N/A
<b>Telephone:</b> 801-281-7979	Permit Term: Life of Mine

Life of Mine: 75 years

Legal Description: Sections 13, 14, 23 and 24, Township 4 South, Range 1 West.

Mineral(s) to be Mined: Highly fractured quartzite and limestone (termed "ledgerock" by the operator), as well as alluvial sand and gravel.

Acres to be Disturbed: 288 acres in phase 1. A total of 5 phases are possible; this approval only involves Phase 1.

Present Land Use: Mining and limited wildlife habitat.

Postmining Land Use: Open space and wildlife habitat.

Variances from Reclamation Standards (Rule R647) Granted: None.

# Soils and Geology

**Soil Description**: Soils are very deep loamy coarse sands and gravelly loams with near-neutral to slightly alkaline pH values and no toxicity problems. Stones and cobblestones comprise the majority of the soils. Fines from the concrete wash tank will be used to reclaim the reclamation fines pond. These materials have been tested and appear to be suitable as substitute soils.

**Special Handling Problems**: There are no special handling problems, but much of the area was disturbed prior to regulation by the Division and before any requirements to salvage soil. Soil will be gathered in areas where it still exists and where salvage is feasible. Substitute materials, including fines mixed with organic material, will be used where soil is not available.

**Geology Description**: The operation is in the Transverse Mountains and contains a complex, rapidly changing mix of cuts imposed upon the naturally dissected terrain. There area exposures of Bonneville and pre-Bonneville

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sediments, underlying deeply weathered tertiary volcanic rocks, and late paleozoic quartzite and limestone bedrock of the Oquirrh Group.

## Hydrology

Ground Water Description: Groundwater in the Salt Lake Valley is divided into three general occurrences. The wells used by the mine produce from the deep unconfined aquifer. Ground water movement in the vicinity of the mine is generally to the north and west towards the Jordan River. There are two wells used for process water and culinary water which are completed in unconsolidated valley fill between 200 and 1200 feet deep. The principle alluvial aquifer has total dissolved solids concentrations between 500 and 1000 mg/l. The State DWQ determined that the mine facilities do no pose any hazards to drinking water and they have been granted a Permit-by-rule.

Surface Water Description: The Point of the Mountain (POM) quarry is located in the Jordan River Drainage basin, on the west-draining slopes of the Transverse Mountains. Average rainfall is 14 to 16 inches. Previous mining operations have intercepted an unnamed ephemeral drainage that drains the back side of Steep Mountain. A 125-acre ephemeral drainage funnels to the POM quarry site, but due to the porous nature of the sand and gravel associated with the Lake Bonneville deposits, it is lost by infiltration. No storm water leaves the property; it is either contained in a pond on site or the large reclamation fines pond operated by Geneva Rock Products (GRP).

Water Monitoring Plan: Four areas are monitored for water quality: one well is used to establish baseline water quality, one site is at the reclamation fines pond to characterize the liquid component of slurried fines, there are two sampling locations at the wash-water site, and one site is upstream and one downstream of an oil separator. All sites are monitored on a semi-annual basis. The monitoring plan focuses specifically on water quality objectives. Field parameters will be collected and laboratory analyses run for two years on these four sites, then a possible modification of parameters will occur in conjunction with DWQ and DOGM concurrence.

## **Ecology**

**Vegetation Type(s); Dominant Species**: Dominant desirable species are rubber rabbitbrush, big sage, Nevada bluegrass, and purple three-awn.

**Percent Surrounding Vegetative Cover**: Cover from desirable species in undisturbed areas adjacent to the mine averages 24.9 percent, and cover from weedy species, primarily cheatgrass, averages 32.3 percent. Cheatgrass and other weeds dominate south- and west-facing slopes, while other slopes have more perennial species.

Wildlife Concerns: There is no critical habitat for any wildlife species or other species of special concern.

**Surface Facilities**: Surface facilities include four underground fuel tanks with five associated pumps, a maintenance shop, portable crushers (grizzlies, feeders, splitters, traps and load bins, jaw crushers, cone crushers, and vsi crushers), screens (dry screens, wet screens, and wash plants), conveyors and stackers. There are 82 conveyors and 38 additional pieces of equipment. All crushers and separators are electric. Fuel storage for loaders and dozers is supplied by 12,000-gallon diesel tanks next to each crusher. These tanks are portable.

#### Mining and Reclamation Plan Summary:

**During Operations**: Existing operations cover 190 acres, including mixed-use facilities, roads, and the pit. Mining of bedrock will be conducted by ripping, drilling, blasting, and excavation/hauling. Mining benches will

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be 25 feet wide, generated in 40 foot lifts, and laid back approximately to an overall 1:1 slope. Oversize material will be crushed utilizing dry crushers within the pit and stockpiled by a radial stacker for loading and transport to the screening and wash plant. Phase 1 includes a total disturbance of 288 acres, of which 59 acres are currently undisturbed ground. The life of mine covers 486.5 acres. GRP abides by a fugitive dust control plan associated within the limitations and conditions of the Air Quality Approval Order for control of all dust sources associated with the POM Quarry.

After Operations: All support facilities and equipment for mining would be removed from the Phase 1 area at the end of Phase I mining. When mining is complete, all trash, oil, fuel, equipment, debris and structures will be removed from the site, and the site will be prepared for reclamation. All process facility buildings will be dismantled and removed from the site. The rock highwalls will be benched and left as is with overall slopes at 1h:1v. The benches will begin to spall after 2 or 3 years making the slopes appear more even than benched. The benches will not be topsoiled due to access problems and safety. They will be aerially seeded one time. There will be no waste rock dumps. The pit floor will topsoiled and seeded. A 4-foot safety berm will be kept in place with adequate warning signs every 150 feet along the perimeter.

#### Surety

**Amount**: \$969,400.00

Form: Surety has not yet been submitted

Renewable Term:

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